REMARKS/ARGUMENTS

Status of the Application

In the office action, claims 13-26 were rejected. Claim 13 was amended to clarify that the cured coating has high partial discharge resistance (see pg. 2, lines 24-27, and pg. 11, lines 19-27, of Applicants' Specification for support) and that the element-oxygen network becomes an inorganic-organic-oxygen network upon curing (support can be derived from the description of the components for the claimed coating composition as set forth on pg. 4-9). To obviate the Examiner's concern from the September 17, 2003, Advisory Action that the "element-oxygen network becomes an inorganic-organic-oxygen" limitation renders claim 13 indefinite, Applicants have amended claim 13 to reflect that the state of cure of the coating composition is that the coating composition is curable (support can be derived from the description of the reactive particle as set forth on pg. 3, line 1 – pg. 8, line 2). Claim 13 was further amended to clarify that the weight percentages are based on components A, B, and C totaling 100 wt.% (see Examples 2-5 for support). The term "conventional" was removed, component (B) was further defined as "having at least one functional group capable of chemically reacting with the reactive particle of component (A)" (see pg. 10, lines 14-20 for support), and component (C) was rewritten as a Markush group for clarity. Additionally, claim 13 was amended for grammatical reasons.

Claim 14 was amended for grammatical reasons. Claims 14-19 were amended to reflect the addition of the word "curable" to claim 13. Claim 25 was amended to clarify that the substrate has a "cured coating comprising the coating composition according to claim 13 thereon" (see pg. 10, lines 1-12 for support). Thus, claims 13-26 are pending. No new matter was added.

Rejections Under 35 U.S.C. § 112, 2nd Paragraph

Claims 13-26 were rejected under 35 U.S.C. § 112, 2nd Paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner asserts that the terms "conventional binder" and "conventional additive, solvent, pigment, and/or filler" are unclear. Additionally, the Examiner asserts that claim 13 fails to indicate

the whole of which the claimed weight percentages comprise. Applicants respectfully traverse these rejections.

Applicants have removed the term "conventional" from claim 13. Applicants respectfully submit, however, that the terms "conventional binder" and "conventional additive, solvent, pigment, and/or filler" are not indefinite. Claims should be interpreted in light of "(A) [t]he content of the particular disclosure; (B) [t]he teachings of the prior art; and (C) [t]he claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." MPEP § 2173.02. Further, examples should not be claimed, but rather should be set forth in the specification. MPEP § 2173.05(d). Here, the Examiner essentially asserts that clarity can be achieved only by claiming specific binders. However, one of ordinary skill in the wire coating sector, the pertinent art at issue, would readily understand what conventional binders are without reference to specific binders. Applicants' specification properly sets forth exemplary binders (see pg. 8, line 8 – pg. 9, line 15) and exemplary additives, solvents, pigments, and fillers (see pg. 9, lines 17-29).

Furthermore, while inconsistency between claim terms and the specification may render claims indefinite, MPEP § 2173.03, claim terms do not have to appear *ipsis verbis* in the specification. See MPEP § 2163(II)(A)(3)(a) (citing Martin v. Johnson, 454 F.2d 746, 751 (C.C.P.A. 1972)). In the specification, Applicants chose the term "of the kind known and customary" to describe conventional binders (pg. 8, lines 8-9). One of ordinary skill in the art would readily equate the term "conventional" as used in the claims with "of the kind known and customary" as used in the specification. See, e.g., American Heritage Dictionary of the English Language (4th ed. 2000), available at http://www.bartleby.com/61/36/C0613600.html (defining conventional as "[b]ased on or in accordance with general agreement, use, or practice; customary").

Regarding the weight percentages, Applicants have amended claim 13 to clarify that the weight percentages are based on components A + B + C equaling 100 weight percent. Thus, Applicants respectfully submit that claims 13-26 point out and distinctly claim their invention.

Rejections Under 35 U.S.C. § 102(b)

Claims 13, 15-19, and 25-26 were rejected under 35 U.S.C. § 102(b) as being anticipated by Vassiliou (U.S. Patent No. 3,986,993) as evidenced by Majumdar et al. (U.S. Patent No. 6,171,769) and Hawley's Condensed Chemical Dictionary. Applicants respectfully traverse these rejections.

Applicants respectfully submit that, by amending claim 13 to clarify that the cured coating compositions have high partial discharge resistance and that the element-oxygen network becomes an inorganic-organic-oxygen network after curing, claim 13 is allowable. To inherently anticipate a claim element, "the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference.'" MPEP § 2112 (quoting In re Robertson, 169 F.3d 743, 745 (Fed. Cir. 1999)) (emphasis added). Applicants note that partial discharge resistance and insulative are not equivalent terms; i.e., a coating composition can be insulative, yet not be resistant to partial discharge. See, e.g., Kerite Company, Importance of Discharge Resistance, available at http://www.kerite.com/webpages/news/importance_discharge.asp (last visited March 19, 2004) (noting that most solid-dielectric insulations degrade when subjected to partial discharge); General Electric Technical Data Book S-1E, available at http://www.nationalguild.com/master/wright/gesilicones.html (noting that polytetrafluoroethylene resins degrade rapidly when subjected to corona) (last visited March 19, 2004). There is no disclosure in Vassiliou regarding partial discharge resistance, and the extrinsic evidence, i.e., Majumdar et al. and Hawley's Condensed Chemical Dictionary, does not show that Vassiliou coating compounds have inherent high partial discharge resistance.

Indeed, as indicated in a previous response, the lack of an inorganic-organic-oxygen network in Vassiliou prevents coatings as disclosed therein from having a high partial discharge resistance. The element-oxygen network of Applicants' claimed coating composition is capable of forming an inorganic-organic-oxygen network upon being cured, whereas Vassiliou indicates that his fluorocarbon coating composition neither contains, nor forms the inorganic-organic-oxygen network formed by Applicants' claimed element-oxygen network. Instead, Vassiliou indicates that the colloidal silica contained in his coating composition is used as an inorganic

component in an inorganic-oxygen network, as opposed to being used in accordance with Applicants' claimed coating composition along with the other components contained therein so as to produce an inorganic-organic-oxygen network.

In fact, although the composition of Vassiliou contains fluorocarbon polymers and colloidal silica, it becomes readily apparent upon reviewing the disclosure of Vassiliou that the fluorocarbon polymer and colloidal silica contained in Vassiliou's composition cannot form the inorganic-organic-oxygen network that is eventually formed by Applicants' claimed element-oxygen network. Indeed, Vassiliou expressly indicates at column 2, lines 3-12, that his fluorocarbon polymers are "completely substituted with fluorine atoms or a combination of fluorine atoms and chlorine atoms," thereby indicating that the fluorocarbon polymers of Vassiliou do not have any chemical groups available to react with the OH-groups of the colloidal silica. Vassiliou further indicates at column 3, lines 1-19, that the fluorocarbon polymers and colloidal silica are contained in his coating composition as two separate colloidal species, and that these separately existing colloidal species form two separate networks, instead of the single inorganic-organic-oxygen network eventually formed by Applicants' claimed element-oxygen network. Additionally, Vassiliou indicates at column 3, lines 1-19, that when the coating composition of Vassiliou is baked to form a finish, the network of the fluorocarbon polymers occupies the empty spaces of the network of the colloidal silica. Vassiliou never mentions that the fluorocarbon polymers and colloidal silica are, or can be, chemically bonded together to form the inorganic-organic-oxygen network eventually formed by the element-oxygen network claimed by Applicants. In contrast, Vassiliou expressly indicates that both of these components are contained either in the coating composition as separate and distinct colloidal species or in the finish as separate and distinct networks.

As the fluorocarbon polymer and colloidal silica contained in Vassiliou's composition cannot form an inorganic-organic-oxygen network by chemically bonding to each other, Vassiliou's composition cannot possibly obtain the high partial discharge resistance that is obtained by the coating composition according to Applicants' claimed invention. More specifically, the organic and inorganic components of Applicants' claimed coating composition do not exist as separate entities, but instead are purposefully incorporated into Applicants claimed coating

composition in such a way as to enable these inorganic and organic components to chemically bond to each other so as to form an inorganic-organic-oxygen network upon being cured. It is through the formation of this inorganic-organic-oxygen network that a coating composition having high partial discharge resistance is obtained by Applicants. As a result, even if a wire were to be coated with the composition of Vassiliou, the high partial discharge resistance obtained by the wires coated with the composition according to Applicants' claimed invention would not be obtained.

Thus, Applicants submit that, at a minimum, the requirement of an inherency be necessarily present is not met. See MPEP § 2112 ("The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.") (emphasis in original).

Applicants note that the whereby clause inserted into claim 13 is not an intended use of the coating composition and, thus, should be construed as a limitation. After application and curing of the coating, the element-oxygen network will become an inorganic-organic-oxygen network and the coating will have high partial discharge resistance.

Because claims 15-19 and 25-26 are dependent claims, which recite even further limitations to the claim that has already been traversed, Applicants rely upon the arguments presented above in rebuttal to the Examiner's assertion that the dependent claims are anticipated under 35 U.S.C. § 102(b).

Provisional Rejections for Obviousness-type Double Patenting

Claims 13-26 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 10/032,858. Applicants believe they have overcome the provisional rejection through the filing of a Terminal Disclaimer, enclosed herewith, to copending Application No. 10/032,858.

Summary

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance and such action is requested.

In order to expedite disposition of this case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Should there be a fee due which is not accounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

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